

REMARKS

Applicants have carefully reviewed the Office Action mailed October 12, 2006, in which claims 1-27 are pending, claims 1-2, 4-10, 14-18 and 21-25 re rejected and claims 3, 11-13, 19-20 and 26-27 are objected to.

Claim Amendments

Claim 1 has been amended to incorporate the subject matter of claim 3, including that of intervening dependent claim 2. Claims 2 and 3 have been cancelled. No new matter has been added.

Claim Rejections under 35 U.S.C. § 103

Claims 1-2, 4-10, 14-18 and 21-25 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Holman et al. (U.S. Patent No. 6,953,470) in view of Barath (U.S. Patent No. 5,196,024). Applicants respectfully traverse the rejection.

Claim 1 was amended as described above to include the limitations of claim 3 and intervening claim 2. Claim 3 was not rejected and was objected to on the sole grounds of being dependent on a rejected base claim. For this reason, Applicants respectfully submit that amended claim 1 is in condition for allowance. Claim 2 has been cancelled, rendering the rejection moot with respect thereto. Claims 4 and 5 depend from claim 1 and contain additional elements, and for at least this reason, Applicants respectfully submit that these claims are in condition for allowance as well.

With respect to claim 6, Applicants respectfully submit that a *prima facie* case of obviousness has not been made because neither Holman et al. nor Barath, singly or in combination, teach or suggest all the elements of the claim. For example, claim 6 recites “[a]n angioplasty balloon catheter comprising: a catheter shaft...a first set of longitudinally aligned openings defined in the shaft; a second set of longitudinally aligned openings defined in the shaft; a balloon coupled to the shaft and disposed over the sets of openings...*a first cutting member coupled to the balloon and radially aligned with the first set of longitudinally aligned openings; and a second cutting member coupled to the balloon and radially aligned with the second set of longitudinally aligned openings.*” (Italics added.)

Holman et al. do not disclose any cutting members. Barath teaches metallic cutting edges 6, but do not disclose aligning them with any sets of longitudinally aligned openings and, indeed, do not even disclose any sets of longitudinally aligned openings. See, for example, Figure 1 on Sheet 1. It can thus be seen that neither reference teaches or suggests all the elements of the claimed invention and that consequently a *prima facie* case of obviousness has not been made. Applicants therefore respectfully submit that claim 6 is in condition for allowance. As claims 7-10 depend therefrom and contain additional elements, Applicants submit that these claims are in condition for allowance as well.

Applicants likewise submit that a *prima facie* case of obviousness has not been made with respect to claim 14. For example, claim 14 recites “[a] cutting balloon catheter, comprising...a first side lumen...a first longitudinally-aligned set of openings...in fluid communication with the first side lumen; a second side lumen...[and] a second longitudinally-aligned set of openings...in fluid communication with the second side lumen.”

In making the rejection, the Examiner argues that “[w]ith respect to the number of lumens, it is well known in the catheter arts to increase the number of lumens in a catheter for any desired purpose. Multi-lumen catheters are well known in the catheter arts.”¹ While Applicants agree that multi-lumen catheters are well known in the catheter arts, Applicants would disagree that it is well known to increase the number of lumens to produce the particular configuration claimed here. Applicants are not claiming generally a multi-lumen catheter, but are instead claiming a specific configuration where there are two inflation lumens fluidly connected to the same inflation balloon through two longitudinally aligned sets of openings. Applicants believe that this configuration is not a mere amalgamation of unrelated features, but provides a functional difference. For example, this multi-lumen configuration may permit the balloon to be inflated or deflated with greater control and predictability. With this configuration, for example, one may supply an equal volume of fluid to each set of openings in the wall of the catheter. To the extent the Examiner is suggesting that such a configuration is common knowledge or is well known in the catheter art area, Applicants respectfully traverse this

¹ Page 3 of the Office Action.

assertion.² The claimed multi-lumen structure is not taught or suggested by either cited reference and Applicants respectfully submit that claim 14 is not obvious over the combination of Holman et al. and Barath. For at least this reason, Applicants respectfully submit that claim 14 is in condition for allowance. As claims 15-18 depend therefrom and contain additional elements, Applicants respectfully submit that these claims are also in condition for allowance.

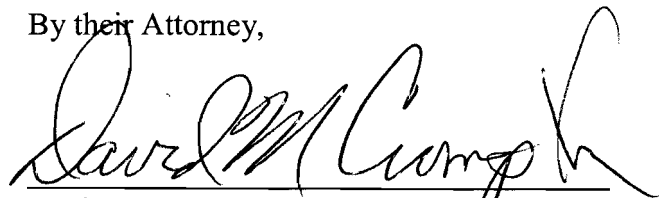
Claim 21 recites "a multi-lumen catheter shaft...a first set of openings defining in the shaft and in fluid communication with one of the plurality of side lumens; [and] a second set of openings defined in the shaft and in fluid communication with another one of the plurality of side lumens." Therefore, for at least the reasons discussed above with regard to claim 14, Applicants respectfully submit that a *prima facie* case of obviousness has not been made against claim 21 and that this claim is in condition for allowance. As claims 22-25 depend therefrom and contain additional elements, Applicants respectfully submit that these claims are allowable as well.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Show-Mean Wu et al.

By their Attorney,



David M. Crompton, Reg. No. 36,772
CROMPTON, SEAGER & TUFTE, LLC
1221 Nicollet Avenue, Suite 800
Minneapolis, MN 55403-2420
Telephone: (612) 677-9050
Facsimile: (612) 359-9349

Date: 1/16/07

² See MPEP 2144.03: "It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known."